2006 Consumer Confidence Report

City of Winchester Public Utilities

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

It is Safe.

Our tap water, provided by Winchester Public Utilities, is safe to drink and is of higher quality than required by all state and federal standards for drinking water. This same water is in compliance with all required water quality monitoring and reporting. The Safe Drinking Water Act (SDWA) has been the primary regulation to ensure that public health and safety is protected in drinking water supplies. Although this information has been available to anyone requesting it, this water quality report, part of the provisions of the Safe Water Drinking Act Amendments of 1996, is intended to share with you how well we are doing.

Every employee of Winchester Public Utilities is committed to producing drinking water that is of the highest quality. Our state-certified laboratory, located at the Percy D. Miller Water Treatment Plant, continuously analyzes water quality throughout the treatment process to ensure superior quality drinking water is delivered to our customers.

It is Reliable.

Your drinking water is surface water obtained from the North Fork of the Shenandoah River. This river supplies the City of Winchester with its daily water requirement, of an average of 7.83 million gallons per day for 2006. The treatment plant has been in operation since 1954 and has been upgraded as required to meet new regulations and water demands. The water goes through a six-step process before it becomes finished water and is pumped through 125 miles of pipe to you, our customer.

Winchester Public Utilities operates 24 hours per day, seven days per week to produce a reliable supply of superior quality drinking water, as well as to ensure sufficient water quantity, customer satisfaction and environmental integrity of our source water. Should you have any questions or concerns please contact us at **540-667-1815** or **540-869-1699**.

Source water Assessments.

Source water assessments for the City of Winchester were completed by the VDH on April and September 10, 2002. These assessments determined that the city's primary water source, North Fork Shenandoah River, may be susceptible to contamination because it is a surface water exposed to varying concentrations and changing hydrologic, hydraulic, and atmospheric conditions that promote migration of contaminants from land use activities of concern within its assessment area. More specific information may be obtained by contacting 540-667-1815 ext 409.

What are we Doing?

Town Run Utilities Project was completed in November 2006.

The new water booster station near John Kerr Elementary school was put into service in October 2006. With this station in operation the Utility Department is now capable of storing an addition 1.0 to 1.5 mg of water in the system.

After performing routine sand filter assessments it was determined that the media in the six gravity sand filters at the treatment plant was in need of replacement. This work was performed during the summer of 2006 along with some modifications to the filter backwash sequence.

At the beginning of January 2007 Public Utilities enacted a new rates for water and wastewater usage; at this time there was an increase of fifteen percent for all water and wastewater used over the minimum. The minimum amount billed did not increase.

Bidding and construction documents have been prepared and are being distributed for upgrades to the Percy D. Miller water treatment plant. Upgrades will consist of the installation of emergency power generation, sedimentation basin modifications and improvements, switch to sodium hypochlorite for disinfection which will replace the use of gaseous chlorine. We anticipate the sedimentation basin modifications to begin by May 2007 and the other projects to follow shortly after that.

Drinking Water & Your Health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ, transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EP/CDC guidelines

on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline **800-426-4791** sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

1. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
2. Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
3. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
4. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production and can also, come from gas stations, urban stormwater runoff, and septic systems.
5. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. The following table lists only those substances that had some level of detection. All of the results in the table were from testing done during 2002. However, the State Health Department allows us to monitor for some substances less than once per year because their concentrations do not change frequently. Some of our data, although accurate, is over one year old. Over 100 substances were sampled for, but were either not present or below the detection levels. All drinking water, including bottled water, may reasonably be expected to contain small amounts of some substances. The presence of contaminants does not necessarily indicate that the water presents a health risk. More information about contaminants and potential health effects can be obtained by calling the United States Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791. You may also contact the Virginia Department of Health, Office of Water Programs, at (540) 463-7136.

City of Winchester
Public Utilities
PWSID # 2840500
CCR – 2006

Turbidity

Contaminant	MCLG	MCL	Highest Single Level Found	Unit Measurement	Lowest Monthly %<0.3 NTU	Violation	Sample Date	Typical Source of Contamination
Turbidity (1)	NA	TT	2.1	NTU	96.5	NO	04/2006	Soil Runoff

(1) Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration and disinfection process.

Total Organic Carbon

Contaminant	MCLG	MCL	Level Found	Unit Measurement	Violation	Sample Date	Typical Source of Contamination
Total Organic Carbon (2)	NA	TT	1.19 Yearly Avg. 0.34-2.67 Range	Ratio of Actual to Required Removals	NO	12/2006	Naturally Present in Environment

(2) Total Organic Carbon (TOC) has no health effects but provides formation medium for disinfection by-products. These by-products include Trihalomethanes (TTHM) and Haloacetic acids (HAA5).

Inorganic Contaminants

Contaminant	MCLG	MCL	Level Found	Unit Measurement	Violation	Sample Date	Typical Source of Contamination
Nitrates	10	10	1.6	Mg/l	NO	02/2006	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride	4	4	Avg. 0.93 Range 0.83–1.02	Mg/l	NO	Monthly	Erosion of natural deposits; deposits; Discharge from fertilizer and aluminum factories; Water additive, which promotes strong teeth.
Alpha Emitters	0	15	<1.5	Pci/l	NO	02/2002	Erosion of natural deposits.
Beta Emitters	0	50	2.9	Pci/l	NO	02/2002	Erosion of natural deposits and man-made deposits

Volatile Organic Contaminants

Contaminant	MCLG	MCL	Level Found	Unit Measurement	Violation	Sample Date	Typical Source of Contamination
Total Trihalomethanes (TTHM)	0	80	Avg-39.4 Range 12 - 104	Ppb	NO	12/2006	By-product of water chlorination
Halo Acetic Acids (HAA5)	0	60	Avg-25.9 Range 8-60	Ppb	NO	12/2006	By-product of water chlorination

Lead and Copper

Contaminant	MCLG	MCL	Level Found	Unit Measurement	AL Exceeded	Samples >AL	Sample Date	Typical Source of Contamination
Lead Copper	0 1.3	AL=15 AL=1.3	9.5 0..31	Ppb Mg/l	NO NO	2 0	06/2006	Corrosion of household plumbing systems; Erosion of natural deposits

Table of Definitions

MCL – Maximum Contaminant Level – Highest level of contaminant level allowed in drinking water

MCLG - Maximum Contaminant Level Goal – The level of a contaminant in drinking water below which there is no known or expected health risk.

NTU – Nephelometric Turbidity Unit – A measure of water clarity.

PCi/L – Picocuries per liter – A measure of radioactivity in water

Mg/l – Milligrams per liter – One milligram per liter corresponds to 1 drop in 16 gallons water. (one milligram per liter is the same as one part per million parts)

Ppb – Parts per billion – Parts per billion – One part per billion corresponds to 1 drop in 15, 750 gallons.

AL – Action Level – The concentration of a contaminant that triggers treatment or other requirements which a water system must follow.

TT – Treatment Technique – A required process intended to reduce the level of a contaminant in drinking water.

Total Organic Carbon Monitoring Violation

Two monitoring violation occurred during the calendar year 2006. These violations occurred because the required numbers of Total Organic Carbon

(TOC) samples were not submitted during the January 2006 and March 2006 monitoring periods. We are required to submit one set of paired samples for TOC each month and have them analyzed by an approved laboratory to determine the quality of water served to our customers. For these two periods we failed to collect the proper samples. To prevent this type of violation from occurring again, we have examined our sampling procedures and modified them so that our monthly water samples will be collected and submitted for analysis in as timely a manner as possible following the receipt of the necessary sampling containers.

Turbidity Violation

On April 23, 2006 rainfall caused runoff with high levels of turbidity to enter our water source, which overloaded the filters at our treatment facility. In other words, our facility currently lacks the technology to effectively lower extremely high turbidity levels to current regulatory standards. However, a plant upgrade in the near future will enable us to meet these standards. During this event, the plant staff monitored chlorine levels and increased the level as needed to compensate for the filtration problem. Also, we increased our feed rate of ferric chloride to compensate for the added turbidity that was encountered. The Virginia Department of Health, Office of Drinking Water, was notified after this event occurred. Procedures were then set in place and arrangements were made for public notification, well within established time lines. Turbidity levels are back to normal; however, we will continue to monitor the turbidity levels at the treatment plant and feed chlorine and ferric chloride to the water. In addition, bacteriological samples will be collected from our distribution system regularly to check the water quality in the system and ensure a safe potable water supply to our customers.

No Coliform Bacteria Found.
A minimum of forty different system samples from thirty different locations throughout the collection system were analyzed for Fecal Coliform and E. Coli bacteria each month. The results of these analyses found NO presence of either type of bacteria in any sample collected.